

The Hindered Energy Exchange Between Solid Materials and Adsorbed Gas Molecules for Ortho-and Para-Hydrogen, by K. Schafer, S. Stots.

GERMAN, per, Z. Elektrochem., Vol. 65, No 7/8,  
1961, pp 623-628.  
Chem Trans Sv 3063

321,753

Sci - Chemistry  
Apr 67

Dielectric Relaxation Time Spectrum of  
Methyl Cellulose In Water, by W. Kuhn,  
P. Moser.

GERMAN, per, Zeitschrift fuer Elektrochemie,  
Vol 65, 1961, pp 649-651.  
IICH-8716

Sci-Chem  
Jul 66

305,550

Dielectric Behavior of Epoxy Resins, by  
H. Kobale, H. Lobl.  
CERN/NA, par, Zeitschrift fur Elektrochemie,  
Vol 65, 1961, pp 662-669. P911009667  
REC SC-T-66-0764

Sci/Materials  
Feb 67

318,534

Grimmeiss, H. G., Rabenau, A. R. and others.  
ON THE ELECTRICAL AND OPTICAL PROPERTIES  
OF SOME CHALCOGENIDES OF THE ELEMENTS  
OF THE IVTH SUB-GROUP. [1962] [19]p. (11 figs.  
omitted) 15 refs.

Order from SLA \$1.60

62-16199

Trans. of Zeit[schrift] für Elektrochemie  
(West Germany) 1961, v. 65 [no. 9] p. 775-[783].

DESCRIPTORS: \*Titanium compounds, \*Zirconium  
compounds, \*Hafnium compounds, \*Chalcogenides,  
\*Crystal structure, Electrical properties, Optics,  
Spectrographic analysis, Photoconductivity.

Electrical and optical studies on single crystals of  
chalcogenides of the elements of the IV-th sub-group  
in particular of titanium are reported. The type of  
conductivity of those compounds was established.  
With the exception of the metallic conducting TiS the  
(Physics -- Solid State, TT, v. 8, no. 7) (over)

62-16199

I. Grimmeiss, H. G.  
II. Rabenau, A. R.

Office of Technical Services

Matajec, R.

PHOTO-CONDUCTIVITY MEASUREMENTS ON  
OPTICALLY SENSITIZED ZnO: EXPERIMENTS ON  
THE MECHANISM OF OPTICAL SENSITIZATION  
(Photoleitungsmeßungen an Optisch Sensibilisiertem  
ZnO: Experimente zum Mechanismus der Optischen  
Sensibilisierung). [1962] [10]p. (foreign text included)  
22 refs.

Order from SLA \$1.10

62-20018

Trans. of [Zeitschrift für Elektrochemie] (West  
Germany) 1961, v. 65, no. 9, p. 783-786.

DESCRIPTORS: \*Photoconductivity, \*Zinc compounds,  
\*Oxides, Measurements, Photolysis, Pigments,  
Sensitivity, Illumination, Photographic emulsions,  
Photosensitivity, Photochemistry.

With the optical sensitization of silver halide emul-  
sions, the pigment molecules return to their initial  
(Chemistry--Physical, TT, v. 10, no. 4) (over)

62-20018

I. Matajec, R.  
II. Title: Experiments...

Office of Technical Services

Dietzel, A. FIELD STRENGTHS OF CATIONS AND THEIR RELA- TIONS TO DEVIATION PHENOMENA, TO FORMATION OF COMPOUNDS, AND TO MELTING POINTS OF SILICATES (Die Kationenfeldstärken und ihre Beziehungen zu Entglasungsvorgängen, zur Ver- bindungsbildung und zu den Schmelzpunkten von Silikaten). [1962] [43p. (foreign text included) 21 refs. Order from SLA \$4.60	62-18107	I. Dietzel, A.
Trans. of Zeitschrift für Elektrochemie (Germany) 1962, v. 48, no. 1, p. 9-23.		
DESCRIPTORS: *Silicates, Melting, *Glass, *Borates, Oxides, *Phosphates, Separation, Liquids, Phase studies, Chemical reactions, Crystal structure, Stabil- ity, Calorimetry, Electrolysis, *Silicon compounds, Crystallization.		
(Chemistry--Physical, TT, v. 9, no. 3)	62-18107	Office of Technical Services

Dielectric Behavior of Epoxide Resins,  
by M. Kobale, H. Lobl.  
GERMANY, per, Z. Elektrochem., Vol 65,  
1962, pp 662-669.  
\*AEC

Sci-Mec & Electronics  
Oct 66

REDUCTION AND ELECTRIC CONDUCTIVITY OF  
ZINC OXIDE [1963] 13p. (figs. refs. omitted).  
Order from SLA \$1.40

63-16530

63-16530

Transl. of Zeitschrift für Elektrochemie (West  
Germany) 1962, v. 66, no. 1, p. 29-35.

DESCRIPTORS: \*Zinc compounds, \*Oxides, \*Reduction  
(Chemistry), Electrical conductance, Hydrogen,  
Electrochemistry.

(Chemistry--Physical, TT, v. 10, no. 7)

Office of Technical Services

Czekalla, J. and Mager, K. J.

THE INFLUENCE OF COMPLEX FORMATION ON SINGLET-TRIPLET TRANSITIONS OF AROMATIC HYDROCARBONS. [1962] 19p. (figs. tables refs. omitted).

Order from: SLA \$1.10

63-10892

63-10892

I. Czekalla, J.  
II. Mager, K. J.

Trans. of Zeitschrift für Elektrochemie (West Germany)  
1962, v. 66, no. 1, p. (S-73).

DESCRIPTORS: \*Complex compounds, Naphthalene, Phenanthrene, Polycyclic compounds, Benzenes, Methyl radicals, \*Chemical bonds, \*Phosphorescence, At - sorption spectrum

The phosphorescence spectra of naphthalene, phenanthrene, coronene, durene, and hexamethyl benzene complexes are employed to study: (1) the influence of the electron acceptor in singlet-triplet transitions; (2) the influence of complex formation of symmetrically- (Chemistry--Physical, TT, v. 10, no. 1) (over)

Office of Technical Services

Riesen, M. and H. Tamm

Sound absorption in solutions of electrolytes as a consequence  
of chemical relaxation. 2. Experimental results and  
relaxation mechanisms for 2-2 electrolytes (Schallabsorption  
in Elektrolytlösungen als Folge chemischer Relaxation II.  
Messergebnisse und Relaxationsmechanismen für 2-2-wertige  
Elektrolyte)

Zeitschrift für Elektrochemie, 66: 107-121. In German.

Transl. by Transl. Bur., Fgn. Lang. Div., Dept. of Sec. of  
State of Canada, for ERBC Marine Ecology Laboratory, Dartmouth,  
N.S., 1972, as Transl. Series No. 2064, 45p., typescript.

Avail. on loan - NMFS, Wash., D.C.

Original Article Checked *JK*

Precision Measurements of the Dielectric Constants of Five Reference Compounds for the Determination of DC- and Dipole Moments I. Purity Tests of Cyclohexane, Benzene, Carbontetrachloride, DI-N-Buty-  
ether, and Fluorobenzene with the aid of the Modern Physio-Chemical Criteria of Purity,  
by R. Mecke, R. Joeckle, G. Klingenberg,  
31pp.

GERMAN, per, Zeitschrift fur Elektrochemie,  
Vol 66, No 3, 1962, pp 239-248.  
CFSTI TT-6-18606.

Sci - Chemistry  
Mar 67

322,373

Precision Measurements of the Dielectric Constants of Five Reference Compounds for the Determination of DC- and Dipole Moments.  
II. Description of the Measuring Apparatus,  
by R. Mecke, W. Ludwig, 26pp.  
GERMAN, per, Zeitschrift fur Elektrochemie,  
Vol 66, No 3, 1962, pp 248-255.  
CFSTI TT-64-18607.

322,374

Sci - Chemistry  
Mar 67

Precision Measurements of the Dielectric Constants of Five Reference Compounds for the Determination of DC- and Dipole Moments. III. Measurements at 100 KC,  
by R. Mecke, R. Joeckle, 10pp.  
GERMAN, per, Zeitschrift fur Elektrochemie,  
Vol 66, No 3, 1962, pp 255-260.  
CFSTI TT-64-18608.

324,372

Sci- Chemistry  
Mar 67

On Selective Solvation of Ions in Solvent  
Mixtures, by H. Schneider. 11p.  
GERMAN, per, Zeit fuer Elektrochemie,  
Vol 66, No 4, 1962, pp 309-312.  
SIA TT-66-10350

Sci-Chem  
Sept 66

310,377

Diffusion Between Two Semi-Infinite Media  
With a Volume Change, by F. Sauer, 11 pp.  
GERMAN, per, Zeitschrift fur Elektrochemie  
66, 1962, pp. 353-363.  
\*CFSTI TT 70-58096  
AVAILABLE FROM NBS ONLY

Sci/elec  
Apr 70

Mechanism of the Formation of Two-Phase  
Oxide Films on Iron Alloys at Elevated  
Temperatures, by A. Rahmel.

GERMAN, per, Zeitschrift fuer Elektrochemie,  
Vol 66, No 4, 1962, pp 363-367.  
NTC-71-14940-07D

BL SI 5379

Feb 72

Investigation of Zirconium Compounds of Low Valencies, by H. Schäfer, M. Skoludok.

Gesamt., p. 2 fuer Elektrochemie, Vol. LVI,  
No. 4, 1962, pp. 367-372.

CSIRO/No. 6095

Schäfer  
May 63

234,422

Kern, J., Dörr, F., and Scheibe, G.  
DELAYED PHLOORESCENCE IN CYANINE DYES,  
[1963] 13p. 26 refs.  
Order from SLA \$1.60

63-18724

Trans. of Zeitschrift für Elektrochemie (West Germany) 1962, v. 66, p. 462-466.

DESCRIPTORS: \*Dyes, \*Fluorescence, \*Luminescence, Atomic Atomic energy levels, Absorption spectrum, Excitation, Electrochemistry.

Polymethinecyanines display a delayed fluorescence at low temperature when dissolved in alcohol-glass. This fluorescence cannot be understood as a high-temperature phosphorescence. It is interpreted as a recombination luminescence caused by retrapping of electrons which have been released from the dye ions by relatively long-wavelength radiant energy and which have been trapped temporarily in electron traps of the (Chemistry--Physical, TT, v. 10, no. 11) (over)

63-18724

1. Title: Cyanine dyes
2. Title: Polymethine cyanines

- I. Kern, J.
- II. Dörr, F.
- III. Scheibe, G.

Office of Technical Services

Ratchford, Robert J. and Rickert, Hans.  
AN ELECTROCHEMICAL KNUDSEN CELL. IN THE  
INVESTIGATION OF THE THERMODYNAMICS OF  
SELENIUM VAPOR AND CONCERNING THE DECOM-  
POSITION OF  $\text{Ag}_2\text{Se}$ . [1963] [7]p. (figs. omitted)  
14 refs.

Order from SLA \$1.10

63-10909

Trans. of Zeitschrift für Elektrochemie (West Germany)  
1962, v. 66, no. 6, p. 497-502.

DESCRIPTORS: \*Electrochemistry, \*Electrolytic  
cells, \*Selenium, Vapors, \*Thermodynamics, \*Silver  
compounds, Selenides, Decomposition, Reaction  
kinetics.

In the first part of the present paper the thermodynamics  
of selenium vapor is investigated. In connection with  
this a new kind of method, the electrochemical Knudsen  
(Chemistry-Physical, TT, v. 10, no. 2) (over).

63-10909

- I. Title: Knudsen cells
- II. Ratchford, R. J.
- III. Rickert, H.

Office of Technical Services

Zirconiumoxide as Electrolyte in Electro-  
Chemical Investigations at Elevated Tem-  
peratures, by H. Schmalzried.  
GERMAN, per, Zeitschrift fur Electrochemie,  
Vol 66, No 7, 1962.  
\*BISI 4672

EE-Germany  
Sci/MUN  
Feb 66

On the Zirconium Oxide as an Electrolyte for  
Electrochemical Research at Elevated Temperatures,  
by Hermann Schmalzried, 11 pp.  
GERMAN, per, Z fuer Electrochemie, Vol LXVI,  
No 7, 1962, pp 572-576. 922494  
AEC-SC-T-64-910

B151 - 46762

Sci-Chem  
Oct 64

267,609

Chemisorption as the Initial Process in the Reaction of  
Gases With Solids, by H. J. Engell, 24 pp.  
GERMAN, per, K Z fuer Elektrochemie, Vol LXVI,  
1962, pp 617-627. 9.22 35.3 L  
ABC-SC-T-64-901

Sci-Phys  
Sep 64

265,858

Observations on O-Diffusion in  $TlO_2$ ,  
 $SO_2$  and Quartz Glass, by R. Haul, 6 pp.  
GERMAN, per, Z. Elektrochem, vol 66,  
1962, pp. 636-641.  
\*NBS TT 70-57870

Sci/chem  
June 70

Methane Synthesis From Hydrogen and Carbon at High  
Temperatures and Pressures, by K. Hedden.  
GERMAN, per, Z fuer Elektrochernie, Vol LXVI, No 8, 9,  
1962, pp 652-661.

Dept of Interior  
TN7 E:57 No 721

Sci - Chem

Mar 64

251,196

Investigations into the Mechanism of the  
Catalysed Phase Boundary Reaction of Hydrogen  
with Palladium Tantalum and Titanium, by  
A. Kusner.

GERMAN, per, Zeit fur Elektrochem., Vol 66,  
1962, pp 675-679.  
NLL Ref: 9022.4 (68/60)

Sci-Phys  
Jan 69

372,588

The Pressure Dependence of  $\text{CaCo}_3$  Formation From the  
Oxide, by W. Nitsch.  
GERMAN, per, Zeitschrift fur Elektrochemie, Vol 66,  
No 8/9, 1962, pp 703-708.  
O. A. trans 1117

sci/mechan engr  
Nov 71

Janicke, Walther and Hoffmann, Heinz.  
AN INVESTIGATION OF RAPID CONSECUTIVE  
REACTIONS WITH CURRENT PULSES. 31p  
(2 figs omitted) 23refs  
Order from SLA \$3.60

TT-64-16699

Trans. of Zeitschrift für Elektrochemie (West Germany)  
1962, v. 66, no. 10, p. 803-813.

TT-64-16699

I. Janicke, W.  
H. Hoffmann, H.

(Chemistry--Physical, TT, v. 12, no. 4)

Office of Technical Services

Reuter, Bertold, Weber, Rudolf, and Jaskowsky, Jorg.  
OXIDE SYSTEMS WITH TRANSITION METALS IN  
DIFFERENT OXIDATION STATES AND THEIR ELECTRIC PROPERTIES. I. THE SYSTEM VO-LAVO<sub>2</sub>.  
[1963] 17p. 26 refs.

Order from SLA \$1.60

63-18153

63-18153  
I. Reuter, B.  
II. Weber, R.  
III. Jaskowsky, J.  
IV. Title: System ...

Trans. of Zeitschrift für Elektrochemie (West Germany) 1962 v. 66, no. 10, p. 832-838.

DESCRIPTORS: \*Lithium compounds, \*Vanadates, Transition elements, \*Vanadium compounds, Manganese compounds, Cobalt compounds, Magnesium compounds, \*Phase studies, Chemical analysis, X-ray diffraction analysis, Resistance (Electrical), \*Thermoelectricity.

Sintered specimens of compounds of the general formula Li<sub>x</sub>V<sub>1-x</sub>O<sub>3</sub> and for comparison those of the general formula VO<sub>1+x/n</sub>, were studied by means of (Physica--Solid State, TT, v. 10, no. 10) (over)

Office of Technical Services

Gerischer, H.  
CATALYST SUSPENSIONS AS CURRENT CARRIERS  
IN ELECTROCHEMICAL PROCESSES. 20 Jun 61 [9p]  
11refs  
Order from SLA \$1.10

63-18937

Trans. of [Zeitschrift für Elektrochemie] (West Germany) 1963, v. 67, p. 164-167.

DESCRIPTORS: \*Electrochemistry, \*Fuel cells,  
\*Catalysts, Electrical conductance, Electrodes,  
Hydrogen, Oxidation, Oxygen, Reduction (Chemistry)

It is shown, by the examples of the oxidation of hydrogen and reduction of oxygen, that considerable currents can be drawn from catalyst suspensions that catalyze these reactions in an electrolyte solution. It thus becomes possible to avoid the usual coupling between the catalytic and current-carrying functions of an electrode in electrochemical processes. (Author)

63-18937  
I. Gerischer, H.

(Chemistry--Physical, TT,  
v. 10, no. 12)

Offices of Technical Services

The Synthesis of Hydrocyanic Acid From Methane  
With Ammonia, by E.Pfeil, P. Hoffmann. 15 pp.  
GERMAN, per, Zeitschrift fur Elektrochemie, Vol 67,  
No 2, 1963, pp 229-235.  
SLA TT-64-16691

Sci/Chemistry  
Jul 66

305,995

<p>Lippert, E. HYDROGEN BRIDGE BONDING AND MAGNETIC PROTON RESONANCE. [1963] 26p (figs tables formulae refs omitted) Order from SLA \$2.60</p> <p>Trans. of [Zeitschrift für Elektrochemie] (West Germany) 1963, v. 67, no. 3, p. 267-280. (Abstract available)</p> <p>DESCRIPTORS: *Chemical bonds, Hydrogen, *Nuclear magnetic resonance, Atomic orbitals, Field theory, Protons.</p> <p>A general survey is given on the results obtained from some recent spectroscopic nuclear magnetic resonance (nmr) investigations on hydrogen bridge bonds, the cause of the association shift is discussed, and the case of a single monomer <math>\rightleftharpoons</math> multimer equilibrium is treated quantitatively. The method for evaluating the equilibrium constants is general in nature, and is not limited to nmr spectroscopy. (Author)</p>	<p>TT-64-10366 I. Lippert, E. TT-64-10366</p> <p>(Chemistry--Physical, TT, v. 11, no. 9) Office of Technical Services</p>
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The Electrochemical Behavior of Porous  
Ion-Exchange Membranes, by U. F. Franck.  
GERMAN, per, Zeit fur Elektrochemie,  
Vol LXVII, No 7, 1963, pp 657-671.  
SLA TT 64-16191

May 67

327,1203

A Contribution to the Electronic and Geometric  
Factors in Catalysis, by J. Voelter, 8 pp.  
GERMAN, per, Z fur Chemie, Vol III, No 9,  
1963, pp 329-333.  
ATB-27R76G

Sci - Chem  
Jul 66

305,827

Gobrecht, H., Meinhardt, O., and Lerche, M.  
POTENTIAL DEPENDENCE OF THE SURFACE  
RECOMBINATION VELOCITY ON Ge (Über die  
Potentialabhängigkeit der Rekombinationsgeschwindigkeit  
an Germanium-Oberflächen). [1963] [18p] (foreign  
text included) 12refs  
Order from SLA \$1.60

TT-63-20722

Trans. of [Zeitschrift für Elektrochemie] (West  
Germany) 1963, v. 67, p. 486-493. (Abstract available)

DESCRIPTORS: \*Germanium, Surface properties,  
\*Recombination reactions, Velocity, Electrolytes,  
Electrodes, Tests.

The behavior of a thin germanium slice with two  
electrolyte contacts has been investigated. Surface  
recombination velocity was measured as a function of  
electrode potential by means of a light chopping method.  
(Chemistry--Physical, TT, v. 11, no. 3) (over)

TT-63-20722

I. Gobrecht, H.  
II. Meinhardt, O.  
III. Lerche, M.

Office of Technical Services

Polarographic Investigations of the Discharge  
Kinetics of Osmium Metal Ions. III.  
Generalized Method of Analysis of the  
Current-Potential Curves and their  
Application to Zinc-Acetate-Complexes,  
by K. Matsuda, T. Ayabe, K. Adachi,  
20 pp.  
GERMAN, per, Zeitschrift für Elektrochemie,  
Vol. 67, No. 6, 1963, pp 593-601.  
SLA 64-30689

336, 205

Sci  
Aug 67

Leonhardt, Horng and Weller, Albert.  
ELECTRON TRANSFER REACTIONS OF EXCITED  
PERYLENE. 14p 23refs.  
Order from SLA \$1.60

TT-64-18541

Trans. of [Zeitschrift für Elektrochemie] (West  
Germany) 1963, v. 67, no. 8, p. 791-795.

TT-64-18541

I. Leonhardt, H.  
II. Weller, A.

(Chemistry--Physical, TT, v. 12, no. 7)

Periodic Electrode Processes and Their Description  
by a Mathematical Model, by U. F. Franck,  
R. Fitzhugh, 24 pp.  
GERMAN, per, Z fuer Elektrochemie, pp 156-168.  
ACSI I-5472  
ID 2204038464

Sci ~ Chem  
Sep 64

266,883

A

Cadmium Sulfide/Dyestuff Photocells, by  
Hans Meier, W. Albrecht.  
GERMAN, per, Zeit fur Elektrochemie, Vol LXVIII,  
No 1, 1964, pp 64-70.  
TC-164

Apr 67

323,076

Investigation of the Dependence of Curie  
Temperature on Particle Size in the Collective  
Paramagnetism of Catalyst Nickel,  
by A. Knappwost, 10 pp.  
GERMAN, per, Z fur Elektrochemie, Vol LXVIII,  
No 2, 1964, pp 163-1969.  
ATS-38R76G

Sci - Chem  
Jul 66

305,826

X-Ray Small Angle Scattering of Isotactic  
and Syndiotactic Polymethyl Methacrylate  
in Solution, by W. Wunderlich.  
GERMAN, per, Zeit fuer Elektrochemie, Vol 68,  
No 7, 1964, pp 646-652.  
TC-1060

Sci-Materials  
Oct 66

313,230

The Significance of Pore Diffusion in the  
Reduction of Iron Ores, by I.. von Bogdandy,  
W. Janke.

GERMAN, par, Z fur Elektrochemie Berichte der  
Bunsengesellschaft fur Physikalische Chemie,  
Vol LXI, No 9, 1957, pp 1146-1153.

BISI 2804

Sci - M/H  
Jul 62  
List No 137

203, 432

70. CEA-tr-A-819

UNCLASSIFIED

TYPES DE REACTIONS D'OXYDATION DES ALLIAGES. (Types  
of Oxidation Reactions of Alloys.) C. Wagner.  
Translated from Z. Elektrochem., Ber. Bunsengesellsch.  
phys. Chem., Dtsch., 63, 7, 772-790(1959). 77p.  
Dep.(mc).

MC-4

Chemistry; Metallurgy; Translations

22. CEA-tr-A-822

UNCLASSIFIED

RECHERCHES SUR LE MECANISME DE L'OXYDATION DU FER  
PUR ET D'ACIERS FAIBLEMENT ALLIES. (Research on  
the Mechanism of Oxidation of Pure Iron and Low-  
Alloy Steels.) H. J. Engell. Translated from  
Z. Elektrochem., Ber Bunsengesellsch. Phys. Chem.,  
Dtsch., 63, 7, 835-845(1959). 39p. Dep.(mc).

MC-25

Corrosion; Metallurgy; Translations

Investigations on the Mechanism of Oxidation of  
Pure Iron and Low Alloy Steels, by H. J. Engell.

GERMAN, per, Zeitschrift fur Elektrochemie Berichte  
der Kunssengesellschaft fur Physikalische Chemie,  
Vol LXIII, 1969, pp 835-859.

BIBI 3020

Sci - M/H  
Feb 63

Fluorescence of H<sub>2</sub>CD (Excitation Conditions and  
Vibrational Analysis), by G. Herzberg, K. Franz.  
11 pp.  
GERMAN, per, Zeit fur Physik Chemie, Vol 76, 1932,  
pp 720-728.  
AIR/FTD/HT-23-626-69

Sci-Chem

T-1 70

About the Electrolytic Production of Dichloro-  
ethylene, by P. Askrenasy, C. Vogelsohn.

GERMAN, per, Zeitschrift fuer Elektrochemie und  
Angewandte Physikalische Chemie, Vol XV, 1909,  
pp 773-779.

AB: Tr 403

May 1951 CTS

Scientific - Chemistry

13, 002

~~SECRET~~

Air Pollu. #236

R-8526-D

3 Aug 67

Hauptversammlung der Deutschen Bunsen-Gesellschaft für  
angewandte physikalische Chemie e.V.

By: M. Bodenstein

From: Zeitschrift für Elektrochemie und Angewandte  
Physikalische Chemie. July 1, 1918, pp183-201 (19 pp)

German ~ est for wds:

Please translate and type 1 original and 1 carbon  
copy. Document can be cut.

A New Method for Determining the Melting  
Point of Refractory Metals,  
by Marcello Pirani, Hans Alterthum.  
GERMAN, per, Z fuer Elektrochemie und  
Angewandte Physikalische Chemie, Vol XXIX,  
1923, pp 5-8.

\*AEC

Sci-Chem M/H  
Mar 65

Conductivity measurements of cryolite alumina  
melts, by Kurt Arndt, Wilhelm Klass, 11 pp.

GERMAN, per, Ztf. f. Elektrochemie u. angew.  
physikal. Chem., Vol XXX, 1924 No 12.

S.L.A. Tr 963

Sci - Chemistry

33, 124

Apr 56

Vaporization of Magnesium Under Vacuum, by Philipp Siedler, Waldemar Kaufmann, 13 pp.

GERMAN, per, ~~Z. fuer Elektrochemie und Ange Physik Chemie~~, Vol XXXVII, 1931, pp 492-497.

Dept of Commerce  
Patent Office  
Sci Lib (Gift)

Sci - Chem  
Aug 57

51,465

Decomposition Pressures of Nitrates and Sulfates  
III, by Bernhard Neumann, August Sonntag.  
GERMAN, per, Zeit Elektrochem Angew Phys Chem,  
Vol 44, No 8, 1935, pp 611-615.  
P911201868-V  
AEC-tr-6938

Sci-Chem  
Aug 68

357,438

A Room With New Equipment for Working With  
Gases, in Particular With the Use of Mercury  
as Sealing Liquid, by A. Klemenc.

GERMAN, per, Z. fuer Elektrochemie under  
Angewandte Physikalische Chemie, Vol XLIV,  
No 4, 1938, pp 243-248.

CSIRC 5172

Sci  
Dec 62

Direct Rapid Analysis With Use of the Dropping  
Mercury Electrode, by J. Doeke, H. Van Guchteken

GERMAN, per, Z. Elektrochemie und Angewandte  
Physik Chemie, Vol ALV, 1939.

Brutch Tr 811 (\$2.80)

Scientific - Chemistry

16.081

Diffusion of Some Metals in Aluminum, by  
A. Beerswald.

GERMAN, per, Z. Elektrochem. Anorg. Phys. Chem., 45, 1939, pp 789-795.

\*NRS TT 70-57339

Sci-Mat  
Aug 70

Obtaining Stable Nb-Mi Alloys by Reduction of  
Nb Pentoxide in the Presence of Mi, by G. Grulbe,  
et al, 12 pp.

GERMAN, per, Z fuer Elektrochemie und Angewandte  
Physikalische Chemie, Dec 1939, pp 851-854.

SLA 58-2423

48181 1099

148,111

Sci - Chem

May 61

Contributions to the Knowledge of Zinc Ferrite Formation and Zinc Reduction Under the Conditions of Zinc Smelting. (Preliminary Communication.) Part I. The Formation of Zinc Ferrite, by A. Simon, 18 pp.

GERMAN, per, Zeitschrift für elektrochemie und angewandte physikalische chemie, Vol XLVI, 1940, pp 753-760.

SLA Tr 1820 Jan 1957

Sci - Min/Met  
Apr 1957

46, 302

The Behaviour of Iron Oxide With Some Admixed  
Foreign Oxides at Temperatures of About 1300°C,  
by N. G. Sejmahl.

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DESCRIPTORS: \*Iron compounds, \*Hydroxides,  
Solids, \*Oxidation, Solutions, Mixtures, X-rays,  
Electron microscopy, Magnetite, Crystals.

The oxidation of  $\text{Fe}(\text{OH})_2$  by  $\text{O}_2$  or  $\text{O}_2/\text{N}_2$  mixtures  
in both strong and weak alkaline solutions in the  
presence of  $\text{Cl}^-$  and  $\text{SO}_4^{2-}$  ions has been investigated  
by using X-rays and electron microscopy. On very  
rapid oxidation,  $\text{FeOOH}$  (formerly designated  $\beta$   
 $\text{Fe}_2\text{O}_3$ ) is formed topochemically. In 1 N NaOH at  
70°C,  $\beta$   $\text{FeOOH}$  is converted into  $\alpha$   $\text{FeOOH}$  through-  
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